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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,059

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Peter Franz

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EXAMINER

ST CYR, DANIEL

ART UNIT

PAPER NUMBER

2876

NOTIFICATION DATE

DELIVERY MODE

05/17/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary

Application No.

10/524,059

Applicant(s)

FRANZ ET AL.

Examiner

Daniel St.Cyr

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-17 and 20-26 is/are rejected.
- 7) ☒ Claim(s) 10, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of the amendment filed 3/14/07 in which claim 2 was amended.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-8, 11-16, and 23-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Phillips, US Patent No. 6,396,927.

Phillips discloses variable density verification comprising: a data carrier 10, having at least a first halftone image 16a-e represented by spaced, linear structural elements 18, a desired tonal value of the halftone image 16 being realized by suitable modulation of the width of the linear structural elements (P is interpreted as linear structure, one side is level, the other side is modulated) which the width is modulated, characterized in that, at least in a detail of the halftone image 16, the width of the linear structural elements 16 is modulated at each place only on one side of the particular baseline so that the linear structural elements are flat on one side and width-modulated on one side (see figs. 1-3; col. 4, line 46 to col. 5).

Re claim 2, comprising a second halftone image 16a-e represented by spaced, width-modulated, linear structural elements that are disposed adjacent to the structural elements of the first halftone image 16 such that adjacent structural elements are associated alternately with the first halftone image and the second halftone image (see fig. 3).

Re claim 3, wherein the second halftone image is also a halftone image with the features of said first halftone image (see fig. 3a-e).

Re claim 4, wherein adjacent structural elements have mutually contrasting colors (due to the disparity contrast between the image 16 and the background 18) (see col. 5, lines 5-15).

Re claim 5, wherein adjacent structural elements are present on adjacent flanks of a relief substrate material 12 (see figs. 1 and 3).

Re claim 6, wherein the first halftone image 16 and the second halftone image are identical (the images 16 represent the same letter P) (see fig. 3).

Re claim 7, wherein the first halftone image 16 and the second halftone image are different (they are positioned differently).

Re claim 8, wherein the halftone image has two or more groups of linear structural elements 58, 62, the structural elements of the same group having the same color and alignment, while the structural elements of different groups have different colors and are differently aligned (see fig. 8A).

Re claim 11, wherein the first halftone image has integrated therein an image not perceptible to the eye and having a predetermined contour (12), by the linear structural elements (5) of the first halftone image (2) being width-modulated on another side of their particular baseline (7) within the contour (12) than in an area of the first halftone image surrounding the contour (see the image P, the image has thermochromic characteristics, exhibiting multiple colors and density) (see col. 10, line 4+).

Re claim 12, wherein adjacent structural elements are width-modulated in opposite directions with respect to their particular baseline (see fig. 3).

Re claim 13, wherein the distances between the baselines of adjacent structural elements are small where the structural elements are adjacent with their flat sides, while being great where the structural elements are adjacent with their width-modulated sides (see fig. 3D, for instance compare any two images P).

Re claim 15, wherein the linear structural elements are disposed mutually offset in at least two adjacent partial areas of the first halftone image (see fig. 8A).

Re claims 16 and 17, wherein the distances between the baselines of adjacent structural elements are different in the two adjacent partial areas (see image 58 and 62 of fig. 8A).

Re claim 23, wherein the first halftone image 16 represents a writing.

Re claim 24, wherein the form of a document of value, selected from the following group of documents of value: bank note, check, share, identification document, admission ticket, travel ticket, certificate, credit card, check card (see fig. 1, 7).

Re claim 25 and 26, the limitations have been met above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9, 14, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips. The teachings of Phillips have been discussed above.

Phillips fails to disclose or fairly suggests some of the details, such as the specific color

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combination of the image, the specific distance, the density, or the tonal value. However, these specifics are just merely specific engineering choice for meeting customer requirements.

It would have been obvious for a person of ordinary skill in the art at the time the invention was made to modify the teachings of Phillips into these specific design choice for meeting specific customer requirements. Such modification would provide a more radiant image with optimal characteristics to convey the information thereon. Furthermore, such minor modification, such as color scheme, specific density, tonal value, distance, are routinely performed by ordinary skill artisans based on familiar considerations, since the advantages are readily foreseeable. Therefore, it would have been an obvious extension as taught by Phillips.

Allowable Subject Matter

6. Claims 10, 18, and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: Although the prior art of record teaches a data carrier, which includes at least a first halftone image represented by a linear structure having a baseline and a modulate width on one side, etc., the prior art of record fails to disclose or fairly suggests having three group of structure elements forming a 15, 45, and 75 degrees angles, or the partial area with different spaced baselines forms at least one bar code formed by the baselines linear structure elements. These limitations in conjunction with other limitations in the claims were not shown by, would not have been obvious over, nor would have been fairly suggested by the prior art of record.

Response to Arguments

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8. Applicant's arguments filed 3/14/07 have been fully considered but they are not persuasive. (see examiner remarks).

REMARKS:

In response to the applicant arguments that the prior art (Phillips, 6,396,927) fails to disclose the features of claims 1, 25 and 26, the examiner respectfully disagrees. It has been clearly outlined above, in the rejection how the prior art anticipates the features of the claims.

In response to the applicant's argument that element 16, "P", does not represent a linear structure element, the examiner respectfully disagrees. A linear structure element can be any object or can take the form of any object, the letter "P" on the carrier represents a linear structural element. In addition, the letters "T" and "D" represent linear structural elements. The applicant further argued that letter "P" has a portion that is not width modulated, the examiner's position is that the structure has a whole has width modulated side and a straight side. To dissect the structure into different portion would not represent the characteristics of structure. Furthermore, the letters "D" and "T" represent structures that are width modulated on one side and a baseline on the other. The applicant arguments are not persuasive. Refer to the rejection above.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel St.Cyr whose telephone number is 571-272-2407. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Daniel St.Cyr
Primary Examiner
Art Unit 2876

A handwritten signature in black ink, appearing to read 'Daniel St.Cyr', with a long horizontal line extending to the right.

DS